

**INITIAL STATEMENT OF REASONS  
FOR  
PROPOSED BUILDING STANDARDS  
OF THE  
OFFICE OF THE STATE FIRE MARSHAL  
REGARDING THE ADOPTION BY REFERENCE OF THE  
2012 EDITION OF THE UNIFORM MECHANICAL CODE  
WITH AMENDMENTS INTO THE 2013 CALIFORNIA MECHANICAL CODE  
CALIFORNIA CODE OF REGULATIONS TITLE 24, PART 4**

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The Administrative Procedure Act requires that an Initial Statement of Reasons be available to the public upon request when rulemaking action is being undertaken. The following are the reasons for proposing this particular rulemaking action:

**STATEMENT OF SPECIFIC PURPOSE AND RATIONALE**  
(Government Code Section 11346.2)

The specific purpose of this rulemaking effort by the Office of the State Fire Marshal is to act accordance with Health and Safety Code section 18928, which requires all proposed regulations to specifically comply with this section in regards to the adoption by reference with amendments to a model code within one year after its publication.

The actions described above are reasonably necessary to carry out the purpose for which it is proposed. The rationale for these actions is to establish minimum requirements for the prevention of fire and for the protection of life and property against fire and panic in occupancies addressed in the 2012 Uniform Mechanical Code and be published as the 2012 California Mechanical Code.

The general purpose of this proposed action is principally intended to update and codify a new edition of the California Mechanical Code (California Code of Regulations, Title 24, Part 4) based upon a more current edition of a model code. The current California Mechanical Code in effect is the 2010 California Mechanical Code which is based upon the 2009 Uniform Mechanical Code of the International Association of Plumbing and Mechanical Officials. This proposed action:

- Repeal the adoption by reference of the 2009 Uniform Mechanical Code and incorporate and adopt by reference in its place the 2012 Uniform Mechanical Code for application and effectiveness in the 2013 California Mechanical Code.
  - Repeal certain amendments to the 2009 Uniform Mechanical Code and/or California Building Standards not addressed by the model code that are no longer necessary.
  - Adopt new building standards or necessary amendments to the 2012 Uniform Mechanical Code that address inadequacies of the 2012 Uniform Mechanical Code as they pertain to California laws.
  - Bring forward previously existing California building standards or amendments, which represent no change in their effect from the 2010 California Building Standards Code.
  - Codify non-substantive editorial and formatting amendments from the format based upon the 2009 Uniform Mechanical Code to the format of the 2012 Uniform Mechanical Code.
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[1]

**CHAPTER 1  
CALIFORNIA ADMINISTRATION  
DIVISION I**

**1.1 – 1.1.12**

The SFM is proposing to maintain the adoption of those existing California provisions contained Sections 1.1 through 1.1.12 with modification.

**1.1.1**

The SFM is proposing to repeal the adoption by reference of the 2009 Uniform Mechanical Code and incorporate and adopt by reference in its place the 2012 Uniform Mechanical Code for application and effectiveness in the 2013 California Mechanical Code.

**1.1.3.2**

The SFM is proposing to clarify the non-regulatory nature of the Matrix Adoption Tables and lead code users to understand them as roadmaps for the codes, references in code language to the tables should be deleted. References imply incorporation into the code. Simply making reference to the application sections of the agencies and the authority of local jurisdictions to modify appears to be adequate for the purpose of this paragraph.

**1.1.11**

The SFM is proposing to reinforce the non-regulatory nature of the Matrix Adoption Tables, language is removed which is not correct in all cases. A non-regulatory note is suggested to emphasize that the tables are meant only to be useful aids to the code user.

The actions described above are reasonably necessary to carry out the purpose for which it is proposed. The rationale for these actions is to establish minimum requirements for the prevention of fire and for the protection of life and property against fire and panic in occupancies that are addressed in the 2012 Uniform Mechanical Code and proposed for publication as the 2013 California Mechanical Code pursuant to Health and Safety Code Section 13108, 13113, 13114, 13131.5, 13143, 17921, and 18949.2.

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[1.1]

**1.11.0 – 1.11.10**

The SFM is proposing to maintain the adoption of those existing California provisions contained Sections 1.11.0 through 1.11.10 without modification.

The actions described above are reasonably necessary to carry out the purpose for which it is proposed. The rationale for these actions is to establish minimum requirements for the prevention of fire and for the protection of life and property against fire and panic in occupancies that are addressed in the 2012 Uniform Mechanical Code and proposed for publication as the 2013 California Mechanical Code pursuant to Health and Safety Code Section 13108, 13113, 13114, 13131.5, 13143, 17921, and 18949.2.

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[1.2]

**DIVISION II**

The SFM proposes to not adopt UMC Chapter 1 pursuant to Health and Safety Code Sections 13108, 13113, 13114, 13131.5, 13143, 13143.6, 17921 and 18949.2.

The actions described above are reasonably necessary to carry out the purpose for which it is proposed. The rationale for these actions is to establish minimum requirements for the prevention of fire and for the protection of life and property against fire and panic in occupancies that are addressed in the 2012 Uniform Mechanical Code and

proposed for publication as the 2013 California Mechanical Code pursuant to Health and Safety Code Section 13108, 13113, 13114, 13131.5, 13143, 17921, and 18949.2.

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[2]

## **CHAPTER 2 DEFINITIONS**

The SFM proposes to adopt Chapter 2 with amendment and California regulation. Furthermore, the SFM is maintaining the adoption of those existing California definitions or model code definitions as amended in Chapter 2 without modification. The SFM is proposing adoption of this Chapter pursuant to Health and Safety Code Sections 13108, 13113, 13114, 13131.5, 13143, 13143.6, 17921 and 18949.2.

### **U.M.C.**

The SFM proposes to repeal the banner and not adopt the definition of U.M.C. as the SFM does not reference such term

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[3]

## **CHAPTER 3 GENERAL REQUIREMENTS**

The SFM is maintaining the adoption of those existing California regulations or Sections as amended in Chapter 3 without modification. The SFM is proposing adoption of this Chapter as amended pursuant to Health and Safety Code Sections 13108, 13113, 13114, 13131.5, 13143, 13143.6, 17921 and 18949.2.

### **303.8**

The above Section as amended or Section containing California regulations are brought forward without modification. There is no change in regulatory effect.

The actions described above are reasonably necessary to carry out the purpose for which it is proposed. The rationale for these actions is to establish minimum requirements for the prevention of fire and for the protection of life and property against fire and panic in occupancies that are addressed in the 2012 Uniform Mechanical Code and proposed for publication as the 2013 California Mechanical Code pursuant to Health and Safety Code Section 13108, 13113, 13114, 13131.5, 13143, 17921, and 18949.2.

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[4]

## **CHAPTER 4 VENTILATION AIR SUPPLY**

The SFM proposes to adopt Chapter 4 with amendment and California regulation. Furthermore the SFM is maintaining the adoption of those existing California regulations or Sections as amended in Chapter 4 without modification. The SFM is proposing adoption of this Chapter with amendment as shown in the corresponding Matrix Adoption Table pursuant to Health and Safety Code Sections 13108, 13113, 13114, 13131.5, 13143, 13143.6, 17921 and 18949.2.

### **401.1**

### **403.9 through 403.9.1.3**

The SFM proposes editorial revisions to the above sections to clarify the intent of Section 403.9 and renumber the section numbers. Historically, the enforcement of the provisions of the prior 2001 California Building Code (UBC) included provisions for garage ventilation and specified the rate at 1.5 cfm/sq ft. For decades, jurisdictions have permitted an alternate to that provision of 14,000 cfm/vehicle - at 2.5% of the number of parking spaces. The condition for the use of that alternate was to provide even distribution of duct drops at 50 ft. intervals around the perimeter and the use of carbon monoxide sensors/monitors to regulate the exhaust if continuous operation is not desired.

With the adoption of the IBC, which references the International Mechanical Code for enclosed garage ventilation requirements, it was necessary to include that amendment in the CMC to continue this practice as a result of the California adoption of the Uniform Mechanical Code.

Since the 2012 UMC has a current Section 403.8, it was necessary to change the section number to 403.9. Also, please note that old Table 4-4 is now Table 403.7. additional restructuring of the section have been converted to exceptions to the general provisions of 403.9. New header and subsections 403.9.1 through 403.9.1.3 have been created that reformat the "Alternative Exhaust Ventilation for Enclosed Parking Garages".

The above modifications to clarify the intent and restructuring do not create any change in regulatory effect.

The actions described above are reasonably necessary to carry out the purpose for which it is proposed. The rationale for these actions is to establish minimum requirements for the prevention of fire and for the protection of life and property against fire and panic in occupancies that are addressed in the 2012 Uniform Mechanical Code and proposed for publication as the 2013 California Mechanical Code pursuant to Health and Safety Code Section 13108, 13113, 13114, 13131.5, 13143, 17921, and 18949.2.

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[5]

## **CHAPTER 5 EXHAUST SYSTEMS**

The SFM proposes to adopt Chapter 5 with amendment and California regulation. Furthermore the SFM is maintaining the adoption of those existing California regulations or Sections as amended in Chapter 5 without modification. The SFM is proposing adoption of this Chapter with amendment pursuant to Health and Safety Code Sections 13108, 13113, 13114, 13131.5, 13143, 13143.6, 17921 and 18949.2.

### **506.2**

The SFM is proposing to repeal amendments to the above section as such are no longer necessary due to the 2012 Uniform Mechanical Code changes that incorporated the California amendments into the model code.

### **509.2.4**

### **511.1.6**

### **512.2.6**

### **513.2.2**

### **513.2.2.1**

### **513.3.2**

### **513.11**

### **513.11.2**

### **516.2.7**

### **516.2.9**

The above Section as amended or Section containing California regulations are brought forward without modification. There is no change in regulatory effect.

The actions described above are reasonably necessary to carry out the purpose for which it is proposed. The rationale for these actions is to establish minimum requirements for the prevention of fire and for the protection of life and property against fire and panic in occupancies that are addressed in the 2012 Uniform Mechanical Code and proposed for publication as the 2013 California Mechanical Code pursuant to Health and Safety Code Section 13108, 13113, 13114, 13131.5, 13143, 17921, and 18949.2.

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[6]

## **CHAPTER 6 DUCT SYSTEMS**

### **601.3**

The above Section as amended or Section containing California regulations are brought forward without modification. There is no change in regulatory effect.

### **602.1**

### **602.4**

### **602.5**

### **602.6**

### **603.2**

### **603.2.1**

### **603.5**

### **604.1**

The SFM is proposing to repeal amendments to the above sections as such are no longer necessary due to the 2012 Uniform Mechanical Code changes that incorporated the California amendments into the model code.

### **605.8**

### **609.1**

The above Section as amended or Section containing California regulations are brought forward without modification. There is no change in regulatory effect.

The actions described above are reasonably necessary to carry out the purpose for which it is proposed. The rationale for these actions is to establish minimum requirements for the prevention of fire and for the protection of life and property against fire and panic in occupancies that are addressed in the 2012 Uniform Mechanical Code and proposed for publication as the 2013 California Mechanical Code pursuant to Health and Safety Code Section 13108, 13113, 13114, 13131.5, 13143, 17921, and 18949.2.

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[7]

## **CHAPTER 7 COMBUSTION AIR**

The SFM is proposing the adoption of Chapter 7 without amendment pursuant to Health and Safety Code Sections 13108, 13113, 13114, 13131.5, 13143, 13143.6, 17921 and 18949.2.

The actions described above are reasonably necessary to carry out the purpose for which it is proposed. The rationale for these actions is to establish minimum requirements for the prevention of fire and for the protection of life and property against fire and panic in occupancies that are addressed in the 2012 Uniform Mechanical Code and proposed for publication as the 2013 California Mechanical Code pursuant to Health and Safety Code Section 13108, 13113, 13114, 13131.5, 13143, 17921, and 18949.2.

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[8]

## **CHAPTER 8 CHIMNEYS AND VENTS**

The SFM is proposing the adoption of Chapter 8 without amendment pursuant to Health and Safety Code Sections 13108, 13113, 13114, 13131.5, 13143, 13143.6, 17921 and 18949.2.

The actions described above are reasonably necessary to carry out the purpose for which it is proposed. The rationale for these actions is to establish minimum requirements for the prevention of fire and for the protection of life and property against fire and panic in occupancies that are addressed in the 2012 Uniform Mechanical Code and proposed for publication as the 2013 California Mechanical Code pursuant to Health and Safety Code Section 13108, 13113, 13114, 13131.5, 13143, 17921, and 18949.2.

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[9]

## **CHAPTER 9 INSTALLATION OF SPECIFIC EQUIPMENT**

The SFM is proposing the adoption of Chapter 9 without amendment pursuant to Health and Safety Code Sections 13108, 13113, 13114, 13131.5, 13143, 13143.6, 17921 and 18949.2.

The actions described above are reasonably necessary to carry out the purpose for which it is proposed. The rationale for these actions is to establish minimum requirements for the prevention of fire and for the protection of life and property against fire and panic in occupancies that are addressed in the 2012 Uniform Mechanical Code and proposed for publication as the 2013 California Mechanical Code pursuant to Health and Safety Code Section 13108, 13113, 13114, 13131.5, 13143, 17921, and 18949.2.

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[10]

## **CHAPTER 10 STEAM AND HOT WATER BOILERS**

The SFM is proposing the adoption of Chapter 10 without amendment pursuant to Health and Safety Code Sections 13108, 13113, 13114, 13131.5, 13143, 13143.6, 17921 and 18949.2.

The actions described above are reasonably necessary to carry out the purpose for which it is proposed. The rationale for these actions is to establish minimum requirements for the prevention of fire and for the protection of life and property against fire and panic in occupancies that are addressed in the 2012 Uniform Mechanical Code and proposed for publication as the 2013 California Mechanical Code pursuant to Health and Safety Code Section 13108, 13113, 13114, 13131.5, 13143, 17921, and 18949.2.

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[11]

## **CHAPTER 11 REFRIGERATION**

The SFM proposes to adopt Chapter 5 with amendment and California regulation. Furthermore the SFM is maintaining the adoption of those existing California regulations or Sections as amended in Chapter 5 without modification. The SFM is proposing adoption of this Chapter with amendment pursuant to Health and Safety Code Sections 13108, 13113, 13114, 13131.5, 13143, 13143.6, 17921 and 18949.2.

### **1106.3.1**

The SFM proposes to repeal the above California regulation and adopt in its place the new 2012 Uniform Mechanical Code Section 1106.14. This repeal and new adoption has no change in regulatory effect.

### **1121.3**

### **1121.4**

The SFM is proposing the adoption of Chapter 9 without amendment pursuant to Health and Safety Code Sections 13108, 13113, 13114, 13131.5, 13143, 13143.6, 17921 and 18949.2.

The actions described above are reasonably necessary to carry out the purpose for which it is proposed. The rationale for these actions is to establish minimum requirements for the prevention of fire and for the protection of life and property against fire and panic in occupancies that are addressed in the 2012 Uniform Mechanical Code and proposed for publication as the 2013 California Mechanical Code pursuant to Health and Safety Code Section 13108, 13113, 13114, 13131.5, 13143, 17921, and 18949.2.

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[12]

## **CHAPTER 12 HYDRONICS**

The SFM proposes to not adopt Chapter 12 pursuant to Health and Safety Code Sections 13108, 13113, 13114, 13131.5, 13143, 13143.6, 17921 and 18949.2.

The actions described above are reasonably necessary to carry out the purpose for which it is proposed. The rationale for these actions is to establish minimum requirements for the prevention of fire and for the protection of life and property against fire and panic in occupancies that are addressed in the 2012 Uniform Mechanical Code and proposed for publication as the 2013 California Mechanical Code pursuant to Health and Safety Code Section 13108, 13113, 13114, 13131.5, 13143, 17921, and 18949.2.

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[13]

## **CHAPTER 13 FUEL GAS PIPING**

The SFM is proposing the adoption of Chapter 13 without amendment pursuant to Health and Safety Code Sections 13108, 13113, 13114, 13131.5, 13143, 13143.6, 17921 and 18949.2.

The actions described above are reasonably necessary to carry out the purpose for which it is proposed. The rationale for these actions is to establish minimum requirements for the prevention of fire and for the protection of life and property against fire and panic in occupancies that are addressed in the 2012 Uniform Mechanical Code and proposed for publication as the 2013 California Mechanical Code pursuant to Health and Safety Code Section 13108, 13113, 13114, 13131.5, 13143, 17921, and 18949.2.

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[14]

## **CHAPTER 14 PROCESS PIPING**

The SFM is proposing the adoption of Chapter 14 without amendment pursuant to Health and Safety Code Sections 13108, 13113, 13114, 13131.5, 13143, 13143.6, 17921 and 18949.2.

The actions described above are reasonably necessary to carry out the purpose for which it is proposed. The rationale for these actions is to establish minimum requirements for the prevention of fire and for the protection of life and property against fire and panic in occupancies that are addressed in the 2012 Uniform Mechanical Code and proposed for publication as the 2013 California Mechanical Code pursuant to Health and Safety Code Section 13108, 13113, 13114, 13131.5, 13143, 17921, and 18949.2.

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[15]

## **CHAPTER 15 SOLAR SYSTEMS**

The SFM proposes to not adopt Chapter 12 pursuant to Health and Safety Code Sections 13108, 13113, 13114, 13131.5, 13143, 13143.6, 17921 and 18949.2.

The actions described above are reasonably necessary to carry out the purpose for which it is proposed. The rationale for these actions is to establish minimum requirements for the prevention of fire and for the protection of life and property against fire and panic in occupancies that are addressed in the 2012 Uniform Mechanical Code and proposed for publication as the 2013 California Mechanical Code pursuant to Health and Safety Code Section 13108, 13113, 13114, 13131.5, 13143, 17921, and 18949.2.

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[16]

## **CHAPTER 16 STATIONARY FUEL CELL POWER PLANTS**

The SFM is proposing the adoption of Chapter 16 without amendment pursuant to Health and Safety Code Sections 13108, 13113, 13114, 13131.5, 13143, 13143.6, 17921 and 18949.2.

The actions described above are reasonably necessary to carry out the purpose for which it is proposed. The rationale for these actions is to establish minimum requirements for the prevention of fire and for the protection of life and property against fire and panic in occupancies that are addressed in the 2012 Uniform Mechanical Code and proposed for publication as the 2013 California Mechanical Code pursuant to Health and Safety Code Section 13108, 13113, 13114, 13131.5, 13143, 17921, and 18949.2.

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[17]

## **CHAPTER 17 STANDARDS**

### **CHAPTER 17 STANDARDS TABLE 17-1 Standards for Equipment and Materials**

The SFM is proposing to repeal amendments to the above standard as such are no longer necessary due to the 2012 Uniform Mechanical Code changes that incorporated the California amendments into the model code. Furthermore, The SFM is proposing the adoption of Chapter 17 without amendment pursuant to Health and Safety Code Sections 13108, 13113, 13114, 13131.5, 13143, 13143.6, 17921 and 18949.2.

The actions described above are reasonably necessary to carry out the purpose for which it is proposed. The rationale for these actions is to establish minimum requirements for the prevention of fire and for the protection of life and property against fire and panic in occupancies that are addressed in the 2012 Uniform Mechanical Code and proposed for publication as the 2013 California Mechanical Code pursuant to Health and Safety Code Section 13108, 13113, 13114, 13131.5, 13143, 17921, and 18949.2.

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[18]

## **APPENDIX A RESIDENTIAL PLAN EXAMINER REVIEW FORM FOR HVAC SYSTEM DESIGN**

## **APPENDIX B PROCEDURES TO BE FOLLOWED TO PLACE GAS EQUIPMENT IN OPERATION**

## **APPENDIX C INSTALLATION AND TESTING OF OIL (LIQUID) FUEL-FIRED EQUIPMENT**



## **APPENDIX D UNIT CONVERSION TABLES**

The SFM proposes to not adopt Appendices A through D pursuant to Health and Safety Code Sections 13108, 13113, 13114, 13131.5, 13143, 13143.6, 17921 and 18949.2.

The actions described above are reasonably necessary to carry out the purpose for which it is proposed. The rationale for these actions is to establish minimum requirements for the prevention of fire and for the protection of life and property against fire and panic in occupancies that are addressed in the 2012 Uniform Mechanical Code and proposed for publication as the 2013 California Mechanical Code pursuant to Health and Safety Code Section 13108, 13113, 13114, 13131.5, 13143, 17921, and 18949.2.

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### **TECHNICAL, THEORETICAL, AND EMPIRICAL STUDY, REPORT, OR SIMILAR DOCUMENTS:**

(Government Code Section 11346.2(b)(2))

The SFM did not rely on any technical, theoretical, and empirical study, report, or similar documents outside of those contained in this rulemaking in proposing that CBSC adopt said model code as a reference standard for the placement of existing SFM regulatory amendments for the California Building Standards Codes.

### **CONSIDERATION OF REASONABLE ALTERNATIVES**

(Government Code Section 11346.2(b)(3)(A))

The SFM has determined that no alternative considered would be more effective in carrying out the purpose for which the regulation is proposed or would be as effective and less burdensome to affected private persons than the proposed adoption by reference with SFM amendments. Therefore, there are no alternatives available to the SFM regarding the proposed adoption of this code.

### **REASONABLE ALTERNATIVES THE AGENCY HAS IDENTIFIED THAT WOULD LESSEN ANY ADVERSE IMPACT ON SMALL BUSINESS.**

(Government Code Section 11346.2(b)(3)(B))

The SFM has determined that no alternative available that would be more effective in carrying out the purpose for which the regulation is proposed or would be as effective and less burdensome to affected private persons than the proposed adoption by reference with SFM amendments. Therefore, no alternatives have been identified or that have otherwise been identified and brought to the attention of the SFM that would lessen any adverse impact on small business.

### **FACTS, EVIDENCE, DOCUMENTS, TESTIMONY, OR OTHER EVIDENCE OF NO SIGNIFICANT ADVERSE IMPACT ON BUSINESS.**

(Government Code Section 11346.2(B)(4))

The SFM has made an determination that this proposed action will not have a significant adverse economic impact on business. Health and Safety Code Section 18928 requires the SFM, when proposing the adoption of a model code, national standard, or specification shall reference the most recent edition of the applicable model code, national standard, or specification. Therefore, there are no other facts, evidence, documents, testimony, or other evidence on which the SFM relies to support this rulemaking.

### **DUPLICATION OR CONFLICTS WITH FEDERAL REGULATIONS**

(Government Code Section 11346.2(b)(5))

The SFM has determined that this proposed rulemaking action does not unnecessary duplicate or conflict with federal regulations contained in the Code of Federal Regulations that address the same issues as this proposed rulemaking.

